	Fonction : $f(t)$	Transformée : $\mathscr{L}(f)(p)$	Fonction : $f(t)$	Transformée : $\mathscr{L}(f)(p)$
1	1	$\dfrac{1}{p}$	e^{at}	$\dfrac{1}{p-a}$
2	t^n	$\dfrac{n!}{p^{n+1}}$	$t^\alpha, \quad \alpha > -1$	$\dfrac{\Gamma(\alpha+1)}{p^{\alpha+1}}$
3	$\mathrm{e}^{kt}\sin at$	$\dfrac{a}{(p-k)^2+a^2}$	$\mathrm{e}^{kt}\cos at$	$\dfrac{p-k}{(p-k)^2+a^2}$
4	$\mathrm{e}^{kt}\operatorname{sh} at$	$\dfrac{a}{(p-k)^2-a^2}$	$\mathrm{e}^{kt}\operatorname{ch} at$	$\dfrac{p-k}{(p-k)^2-a^2}$
5	$t\sin at$	$\dfrac{2ap}{(p^2+a^2)^2}$	$t\cos at$	$\dfrac{p^2-a^2}{(p^2+a^2)^2}$
6	$t\,\mathrm{e}^{-\alpha t}$	$\dfrac{1}{(p+\alpha)^2}$	$t^n\,\mathrm{e}^{-\alpha t}$	$\dfrac{n!}{(p+\alpha)^{n+1}}$
7	$\operatorname{Log} t$	$\dfrac{\Gamma'(1)-\operatorname{Log} p}{p}$	$\dfrac{\mathrm{e}^{-at}-\mathrm{e}^{-bt}}{t}$	$\operatorname{Log}\dfrac{p+b}{p+a}$
8	$t^n f(t)$	$(-1)^n\dfrac{d^n}{dp^n}\left[\mathscr{L}(f)\right](p)$	$tf'(t)$	$-\mathscr{L}(f)(p)-p\dfrac{d}{dp}[\mathscr{L}(f)(p)]$
9	$f'(t)$	$p\mathscr{L}(f)(p)-f(0)$	$f''(t)$	$p^2\mathscr{L}(f)(p)-pf(0)-f'(0)$
10	$f(t-\alpha);\ \alpha>0$	$\mathrm{e}^{-\alpha p}\mathscr{L}(f)(p)$	$f^{(n)}(t)$	$p^n\mathscr{L}(f)(p)-\displaystyle\sum_{k=0}^{n-1}p^{n-1-k}f^{(k)}(0)$
11	$\mathrm{e}^{kt}f(t)$	$\mathscr{L}(f)(p-k)$	$\dfrac{f(t)}{t}$	$\displaystyle\int_p^\infty \mathscr{L}(f)(\tau)\ d\tau$
12	$(f\star g)(t)$	$\mathscr{L}(f)(p)\mathscr{L}(g)(p)$	$\displaystyle\int_0^t f(\tau)\ d\tau$	$\dfrac{\mathscr{L}(f)(p)}{p}$
13	$f(kt);\ k>0$	$\dfrac{1}{k}\mathscr{L}(f)\left(\dfrac{p}{k}\right)$	$f(t)=f(t+\omega);\ \omega>0$	$\dfrac{1}{1-\mathrm{e}^{\omega p}}\displaystyle\int_0^\omega \mathrm{e}^{-pt}f(t)dt$

- $\displaystyle\lim_{p\longrightarrow\infty}\mathscr{L}(f)(p)=0$
- $\displaystyle\lim_{p\longrightarrow\infty}p\mathscr{L}(f)(p)=f(0)$
- $\displaystyle(f\star g)(t)=\int_0^t f(t-x)g(x)dx$